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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,652	11/21/2001	Michael L. Bessire	10013342-1	1407

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

PUENTE, EMERSON C

ART UNIT	PAPER NUMBER
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2113

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/989,652	Applicant(s) BESSIRE, MICHAEL L.	
	Examiner Emerson C Puente	Art Unit 2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/21/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is made **Non-Final**.

Claims 20-45 have been examined. Claim 1-19 has been cancelled.

Claim Objections

Claims 34 and 45 objected to because of the following informalities:

In regard to claim 34 and 45, please change the limitation “the copy” to “a copy”. The limitation “the copy” lacks antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 20-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,701,449 of Davis et al. referred hereinafter “Davis” in view of US Patent No. 5,235,700 of Alaiwan et al. referred hereinafter “Alaiwan”.

In regards to claim 20, 29, 34, 35, and 45, Davis discloses a computer system comprising:
a first iSCSI controller (see figure 1 item 108, 110);
a second iSCSI controller, the second iSCSI controller coupled to the first iSCSI controller (see figure 1 item 108, 110), the first iSCSI controller configured to receive an I/O request over a network (see column 2 lines 55-58) and, wherein responsive to detecting a failure

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of the first iSCSI controller, the second iSCSI controller assumes the network address of the first iSCSI controller (see column 4 lines 5-15 and 40-45)

However, Davis fails to disclose

copying the I/O request to memory corresponding to the second iSCSI controller and wherein responsive to determining that the I/O request has been committed, retrieves the copy of the I/O request and writes the copy of the I/O request to a storage system.

Alaiwan discloses

copying the I/O request to memory corresponding to the second iSCSI controller (see column 5 lines 18-27) and wherein responsive to determining that the I/O request has been committed, retrieves the copy of the I/O request and writes the copy of the I/O request to a storage system (see column 10 lines 15-20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to copy the I/O request to memory corresponding to the second iSCSI controller and wherein responsive to determining that the I/O request has been committed, retrieves the copy of the I/O request and writes the copy of the I/O request to a storage system. A person of ordinary skill in the art at the time of the invention would have been motivated because Davis is concerned with providing failover (see column 4 lines 25-33) and enabling copying the I/O request to memory corresponding to the second iSCSI controller and enabling responsive to determining that the I/O request has been committed, retrieves the copy of the I/O request and writing the copy of the I/O request to a storage system, as per teachings of Alaiwan, is a known means for providing failover from the last recovery point (see column 10 lines 15-20).

In regards to claim 21, 30, and 36, Davis in view of Alaiwan discloses

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responsive to determining that the I/O request has not been committed, the second iSCSI controller assumes the network address of the first iSCSI controller and receives the I/O request resent from a server and writes the resent I/O request to the storage system (see column 10 lines 20-25 of Alaiwan).

In regards to claim 22, 28, 31, 33, 37, and 44, Davis discloses wherein the second iSCSI controller retrieving the network address of the first iSCSI controller from the memory (see column 4 lines 5-15 and 40-45).

In regards to claim 23 Davis discloses: wherein the second controller includes a first network address and a second network address, the first network address corresponding to a network address of the second iSCSI controller and the second network address corresponding to the network address of the first iSCSI controller (see column 4 lines 5-15 and 40-45).

In regards to claim 24 and 39, Davis discloses: a first iSCSI TCP/IP protocol stack coupled between the first iSCSI controller and the network, and a second iSCSI TCP/IP protocol stack coupled between the iSCSI controller and the network (see column 3 lines 50-55)

In regards to claim 25, 32, and 41, Davis discloses: wherein the first iSCSI controller and the second iSCSI controller are each configured to communicate with a remotely located host server over the network (see column 1 lines 15-25) .

In regards to claim 26 and 42, Davis discloses:

wherein the network includes an IP network (see column 3 lines 47-55).

In regards to claim 27, Davis dicloses:

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wherein the storage system includes a fiber channel storage unit (see column 2 line 67).

In regards to claim 38, Davis discloses:

wherein the logic is configured to assign the network controller with a primary network address and a secondary network address, the primary network address corresponding to the network address of the network controller before detected failure of the second network controller, the secondary network address corresponding to the network address of the second network controller substantially upon detected failure of the second network controller (see column 4 lines 5-15 and 40-45).

In regards to claim 40, Davis discloses:

wherein the network controller is configured as an iSCSI controller (see column 3 lines 10-15).

In regards to claim 43, Davis discloses:

a second communication port configured to enable access to the storage system (see figure 2 item 206, 208 and column 2 lines 50-65).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

See PTO 892.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emerson C Puente whose telephone number is (571) 272-3652. The examiner can normally be reached on 8-5 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ecp
3/17/05


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